

### Amendments to the Abstract:

Amend the Abstract of the Disclosure as follows:

-- A method of representing the effects on a received signal of a radio communications channel having  $L$  paths with a reduced computational effort is achieved by transforming a representation of the channel into a simplified representation. Each path of the radio communications channel has an average attenuation and a pre-determined respective delay. The received signal includes a combination of correlated components determined from an effect of pulse shaping filters on the received signal, each component being correlated with respect to each of the other components represented by a plurality of correlation coefficients. ~~The method comprises generating a plurality of complex zero-mean gaussian random variables each having a pre-determined variance, and summing the variables, to form a representation of the signal received via the radio communications channel. The pre-determined variance of each variable is calculated from the eigen values of a matrix formed from the correlation coefficients and a channel correlation matrix which includes the average attenuation of each of the  $L$  paths. Accordingly a  $A$  transformation of the an  $L$ -~~ path channel into a simplified representation is effected, without a requirement to represent the correlated components of the received signal. The correlated components may be, for example, the signal components produced by each of a plurality of correlators of a rake receiver.

[Fig 3 for abstract]--